

**MAINE MODEL FLOODPLAIN MANAGEMENT  
ORDINANCE**

**COMMENTARY**

**ARTICLE I—PURPOSE AND ESTABLISHMENT**

Certain areas of the (Town/City) of \_\_\_\_\_, Maine are subject to periodic flooding, causing serious damages to properties within these areas. Relief is available in the form of flood insurance as authorized by the National Flood Insurance Act of 1968.

Therefore, the (Town/City) of \_\_\_\_\_, Maine has chosen to become a participating community in the National Flood Insurance Program, and agrees to comply with the requirements of the National Flood Insurance Act of 1968 (P.L. 90-488, as amended) as delineated in this Floodplain Management Ordinance.

It is the intent of the (Town/City) of \_\_\_\_\_, Maine to require the recognition and evaluation of flood hazards in all official actions relating to land use in the floodplain areas having special flood hazards.

The (Town/City) of \_\_\_\_\_ has the legal authority to adopt land use and control measures to reduce future flood losses pursuant to Title 30-A MRSA, Sections 3001-3007, 4352 and 4401-4407.

The National Flood Insurance Program, established in the aforesaid Act, provides that areas of the (Town/City) of \_\_\_\_\_ having a special flood hazard be identified by the Federal Emergency Management Agency and that floodplain management measures be applied in such flood hazard areas. This Ordinance establishes a Flood Hazard Development Permit system and review procedure for development activities in the designated flood hazard areas of the (Town/City) of \_\_\_\_\_, Maine.

The areas of special flood hazard, Zones A, A1-30, AE, AO, AH, V1-30, and/or VE, are identified by the Federal Emergency Management Agency in a report entitled "Flood Insurance Study - (Town/City) of \_\_\_\_\_, Maine, \_\_\_\_\_ County," dated \_\_\_\_\_ with accompanying "Flood Insurance Rate Map" dated \_\_\_\_\_ and "Flood Boundary and Floodway Map" dated \_\_\_\_\_, which are hereby adopted by reference and declared to be a part of this Ordinance.

**ARTICLE II - PERMIT REQUIRED**

Before any construction or other development (as defined in Article XIV), including the placement of manufactured homes, begins within any areas of special flood hazard established in Article I, a Flood Hazard Development Permit shall be obtained from the \_\_\_\_\_ except as provided in Article VII. This permit shall be in addition to any other permits

The first four paragraphs were added to Article I in 1996. These paragraphs were formerly in the Statement of Purpose and intent. The purpose of these paragraphs is to clarify the purpose of the community's participation in the National Flood Insurance Program.

This article establishes the purposes of the ordinance and references the federal statutes and programs.

This paragraph references the Flood Insurance Study and/or the maps which have been prepared for the community and incorporates these documents as parts of the ordinance. If your community is not a coastal community your ordinance should not include reference to zones V1-30 or VE. Communities with FIRM maps after 1986 will not have A1-30 Zones. Likewise, communities with older FIRMs will not have AE Zones. AO and AH are typically coastal flooding zones. If a detailed study has not been done for your community, your ordinance should only refer to Zone A and will not reference a Flood Insurance Study. It will, however reference the Flood Insurance Rate Map.

This Article establishes the requirement for a permit prior to any development within the floodplain. The key word here is "development." The NFIP includes more in the definition of development than most communities usually regulate. The blank here needs to identify the official administering the ordinance,

which may be required pursuant to the codes and ordinances of the (Town/City) of \_\_\_\_\_, Maine.

### **ARTICLE III - APPLICATION FOR PERMIT**

The application for a Flood Hazard Development Permit shall be submitted to the \_\_\_\_\_ and shall include:

- A. The name, address and phone number of the applicant, owner, and contractor;
- B. An address and a map indicating the location of the construction site;
- C. A site plan showing location of existing and/or proposed development, including but not limited to structures, sewage disposal facilities, water supply facilities, areas to be cut and filled, and lot dimensions;
- D. A statement of the intended use of the structure and/or development;
- E. A statement of the cost of the development including all materials and labor;
- F. A statement as to the type of sewage system proposed;
- G. Specification of dimensions of the proposed structure and/or development;

[Items H-K.3. apply only to new construction and substantial improvements.]

- H. The elevation in relation to the National Geodetic Vertical Datum (NGVD), or to a locally established datum in Zone A only, of the:
  - 1. base flood at the proposed site of all new or substantially improved structures, which is determined:
    - a. in Zones A1-30, AE, AO, AH, V1-30, and VE from data contained in the "Flood Insurance Study - (Town/City) of \_\_\_\_\_, Maine," as described in Article I; or,
    - b. in Zone A:
      - (1) from any base flood elevation data from federal, state, or other technical sources (such as FEMA's Quick-2 model, FEMA 265/July 1995), including information obtained pursuant to

usually the Code Enforcement Officer. In some communities it is the Planning Board.

See discussion in Chapter III in this manual regarding coordinating these requirements with other ordinances.

The blank here needs to identify the official responsible for accepting the permit application, usually the Code Enforcement Officer. In some communities it may be the Planning Board.

The Floodplain Management Program has a model permit application that a community may follow in developing their own application. These items are the minimum necessary to adequately review and administer the ordinance.

Even in Zone A NGVD should be used where practicable. Elevations should be recorded on an Elevation Certificate (FEMA Form 81-31, 08/99, as amended) or Floodproofing Certificate (FEMA Form 81-65, 05/93, as amended) and submitted with permit application.

NGVD is not to be confused with mean high or mean low water. See definition.

If your community has not had a detailed study done, reference to these Zones should not be made. Inland communities or communities without Velocity Zones should not make reference to Zones V1-30 or VE.

See page 2-7 in this manual – Dealing With Unnumbered A Zones.

FEMA's Quick-2 program can be used to calculate BFEs in open flow channels.

Article VI.K. and IX.D.;

- (2) from the contour elevation extrapolated from a best fit analysis of the floodplain boundary when overlaid onto a USGS Quadrangle Map or other topographic map prepared by a Professional Land Surveyor or registered professional engineer, if the floodplain boundary has a significant correlation to the elevation contour line(s); or, in the absence of all other data,
- (3) to be the elevation of the ground at the intersection of the floodplain boundary and a line perpendicular to the shoreline which passes along the ground through the site of the proposed building.

- 2. highest and lowest grades at the site adjacent to the walls of the proposed building;
- 3. lowest floor, including basement; and whether or not such structures contain a basement; and,
- 4. level, in the case of non-residential structures only, to which the structure will be floodproofed;

I. A description of an elevation reference point established on the site of all developments for which elevation standards apply as required in Article VI;

J. A written certification by a Professional Land Surveyor, registered professional engineer or architect, that the base flood elevation and grade elevations shown on the application are accurate

K. The following certifications as required in Article VI by a registered professional engineer or architect:

- 1. a Floodproofing Certificate (FEMA Form 81-65, 08/99, as amended), to verify that the floodproofing methods for any non-residential structures will meet the floodproofing criteria of Article III.H.4.; Article VI.G.; and other applicable standards in Article VI;

A Professional Land Surveyor or registered professional engineer needs to establish a reference mark (RM) on site for convenient referencing during the planning of construction by applicant and CEO.

Residential structures are required to be elevated and the floodproofing concept can only be used as a retrofit, and only if it is a non-substantial improvement. This is accomplished by the use of the Floodproofing Certificate (FEMA form 81-65, 08/99, as amended).

2. a V-Zone Certificate to verify that the construction in coastal high hazard areas, Zones V1-30 and VE, will meet the criteria of Article VI.P.; and other applicable standards in Article VI;
3. a Hydraulic Openings Certificate to verify that engineered hydraulic openings in foundation walls will meet the standards of Article VI.L.2.a.;
4. a certified statement that bridges will meet the standards of Article VI.M.;
5. a certified statement that containment walls will meet the standards of Article VI.N.;

- L. A description of the extent to which any water course will be altered or relocated as a result of the proposed development; and,
- M. A statement of construction plans describing in detail how each applicable development standard in Article VI will be met.

#### **ARTICLE IV - APPLICATION FEE AND EXPERT'S FEE**

A non-refundable application fee of \$\_\_\_\_\_ shall be paid to the (Town/City) Clerk and a copy of a receipt for the same shall accompany the application.

An additional fee may be charged if the \_\_\_\_\_ and/or Board of Appeals needs the assistance of a professional engineer or other expert. The expert's fee shall be paid in full by the applicant within 10 days after the town submits a bill to the applicant. Failure to pay the bill shall constitute a violation of the ordinance and be grounds for the issuance of a stop work order. An expert shall not be hired by the municipality at the expense of an applicant until the applicant has either consented to such hiring in writing or been given an opportunity to be heard on the subject. An applicant who is dissatisfied with a decision to hire expert assistance may appeal that decision to the Board of Appeals.

#### **ARTICLE V - REVIEW STANDARDS FOR FLOOD HAZARD DEVELOPMENT PERMIT APPLICATIONS**

The \_\_\_\_\_ shall:

- A. Review all applications for the Flood Hazard Development Permit to assure that proposed developments are reasonably safe from flooding and to determine that all pertinent requirements

Inland communities or communities without Velocity Zones should not include this paragraph.

See Appendix F – Other Certificates for V-Zone Certificate.

See FEMA Technical Bulletin, TB 1-93, *Openings in Foundation Walls* for further guidance.  
See Appendix F – Other Certificates for Hydraulic Openings Certificate. This certificate is not required if designing openings to the minimum standard as outlined in Article VI.L.2.b.

Altered or relocated water courses usually require Federal and State permits (Corps of Engineers and Department of Environmental Protection) before a local permit is issued. See page 3-2 in this manual - "Other Regulations". Also, the community has notification responsibilities under Article V.E., and may have other responsibilities under 44 CFR 65.3.

The model ordinance suggests that communities charge a fee to help offset the costs of administering the ordinance. A sliding scale may be the best remedy. Do you want to charge the same fee for a minor fill permit as you do for a large commercial building? See page 62 in this manual for possible alternatives to the fee structure.

This paragraph allows the community to collect an additional fee for applications of greater technical difficulty to allow the community to hire the necessary technical assistance. This allows for additional information or clarification on issues needing further review, or in the case of a floodway concern, a hydraulic engineer.

The blank in this paragraph needs to identify the official administering the ordinance, usually the Code Enforcement Officer.

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Required by NFIP: 44 CFR 60.3(a)(3)

of Article VI (Development Standards) have been, or will be met;

B. Utilize, in the review of all Flood Hazard Development Permit applications:

1. the base flood data contained in the "Flood Insurance Study - (Town/City) of \_\_\_\_\_, Maine," as described in Article I.;
2. in special flood hazard areas where base flood elevation data are not provided, the \_\_\_\_\_ shall obtain, review and reasonably utilize any base flood elevation and floodway data from federal, state, or other technical sources, including information obtained pursuant to Article III.H.1.b.; Article VI.K.; and Article IX.D., in order to administer Article VI of this Ordinance; and,
3. when the community establishes a base flood elevation in a Zone A by methods outlined in Article III.H.1.b., the community shall submit that data to the Maine Floodplain Management Program in the State Planning Office.

Required by NFIP: 44 CFR 60.3(b)(4)

Identify the official administering the ordinance.

C. Make interpretations of the location of boundaries of special flood hazard areas shown on the maps described in Article I of this Ordinance;

Required by NFIP: 44 CFR 60.3(a)(3) and 44 CFR 59.22(a)(8)

D. In the review of Flood Hazard Development Permit applications, determine that all necessary permits have been obtained from those federal, state, and local government agencies from which prior approval is required by federal or state law, including but not limited to Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1344;

Required by NFIP: 44 CFR 60.3(a)(2)

All other permits must have been issued and be in hand prior to the issuance of the Flood Hazard Development Permit. The Flood Hazard Development Permit is the last permit to be issued in the chain of permits.

E. Notify adjacent municipalities, the Department of Environmental Protection, and the Maine Floodplain Management Program in the State Planning Office prior to any alteration or relocation of a water course and submit copies of such notifications to the Federal Emergency Management Agency;

Required by NFIP: 44 CFR 60.3(b)(6)

F. If the application satisfies the requirements of this Ordinance, approve the issuance of one of the following Flood Hazard Development Permits, based on the type of development:

Required by NFIP: 44 CFR 60.3(b)(1)

The Decision Tree located in Appendix B may be helpful in determining which type of permit to issue.

1. A two part Flood Hazard Development

A two part system is not required by NFIP, but is

Permit for elevated structures. Part I shall authorize the applicant to build a structure to and including the first horizontal floor only above the base flood level. At that time the applicant shall provide the Code Enforcement Officer with a second Elevation Certificate completed by a Professional Land Surveyor, registered professional engineer or architect based on the Part I permit construction, "as built", for verifying compliance with the elevation requirements of Article VI, paragraphs F, G, H, or P. Following review of the Elevation Certificate data, which shall take place within 72 hours of receipt of the application, the Code Enforcement Officer shall issue Part II of the Flood Hazard Development Permit. Part II shall authorize the applicant to complete the construction project; or,

2. A Flood Hazard Development Permit for Floodproofing of Non-Residential Structures that are new construction or substantially improved non-residential structures that are not being elevated but that meet the floodproofing standards of Article VI.G.1.a.,b., and c. The application for this permit shall include a Floodproofing Certificate signed by a registered professional engineer or architect; or,
3. A Flood Hazard Development Permit for Minor Development for all development that is not new construction or a substantial improvement, such as repairs, maintenance, renovations, or additions, whose value is less than 50% of the market value of the structure. Minor development also includes, but is not limited to: accessory structures as provided for in Article VI.J., mining, dredging, filling, grading, paving, excavation, drilling operations, storage of equipment or materials, deposition or extraction of materials, public or private sewage disposal systems or water supply facilities that do not involve structures; and non-structural projects such as bridges, dams, towers, fencing, pipelines, wharves, and piers.

For development that requires review and approval as a Conditional Use, as provided for in this Ordinance, the Flood Hazard Development Permit Application shall be acted upon by the Planning Board as required in Article VII.

strongly recommended by the State Planning Office. See discussion on page 62 under the Process and Inspections section.

Model permit forms are available from the Maine Floodplain Management Program.

It is easier to correct a problem of lowest floor elevation before the structure is completed. The Elevation Certificate is defined in the definition as the FEMA form. Credit is also given under the Community Rating System (CRS) for using the FEMA Elevation Certificate. A surveyor's letter is not acceptable.

Conditional Use Permits are not part of the NFIP requirements but have been approved for use in Maine by FEMA as specified in this ordinance.

- G. Maintain, as a permanent record, copies of all Flood Hazard Development Permit Applications, corresponding Permits issued, and data relevant thereto, including reports of the Board of Appeals on variances granted under the provisions of Article X of this Ordinance, and copies of Elevation Certificates, Floodproofing Certificates, Certificates of Compliance and certifications of design standards required under the provisions of Articles III, VI, and VIII of this Ordinance.

Required by NFIP: 44 CFR 59.22(a)(9)(iii), 44 CFR 60.3(b)(5)(iii), 44 CFR 60.3(c)(4)(ii), and 44 CFR 60.6(a)(5) and (6)

Information in regard to lowest floor elevation is often needed by insurance agents when rating a flood insurance policy.

## **ARTICLE VI - DEVELOPMENT STANDARDS**

All developments in areas of special flood hazard shall meet the following applicable standards:

**A. All Development** - All development shall:

1. be designed or modified and adequately anchored to prevent flotation (excluding piers and docks), collapse or lateral movement of the development resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy;
2. use construction materials that are resistant to flood damage;
3. use construction methods and practices that will minimize flood damage; and,
4. use electrical, heating, ventilation, plumbing, and air conditioning equipment, and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during flooding conditions.

Required by NFIP: 44 CFR 60.3(a)(3)(ii)

Required by NFIP: 44 CFR 60.3(a)(3)(ii)  
See FEMA Technical Bulletin, TB 2-93, *Flood Resistant Materials Requirements* for further guidance.

Required by NFIP: 44 CFR 60.3(a)(3)(iii)

Required by NFIP: 44 CFR 60.3(a)(3)(iv)

- B. Water Supply** - All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the systems.

Required by NFIP: 44 CFR 60.3(a)(5)

To meet the standards of paragraphs B, C, and D, permit officials should have verification from design professionals that the specific flooding risks at the site were taken into account when designing the system.

- C. Sanitary Sewage Systems** - All new and replacement sanitary sewage systems shall be designed and located to minimize or eliminate infiltration of flood waters into the system and discharges from the system into flood waters.

Required by NFIP: 44 CFR 60.3(a)(6)(i)

- D. On Site Waste Disposal Systems** - On site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during floods.

Required by NFIP: 44 CFR 60.3(a)(6)(ii)

- E. Watercourse Carrying Capacity** - All

development associated with altered or relocated portions of a watercourse shall be constructed and maintained in such a manner that no reduction occurs in the flood carrying capacity of the watercourse.

Required by NFIP: 44 CFR 60.3(b)(7)

F. **Residential** - New construction or substantial improvement of any residential structure located within:

Required by NFIP: 44 CFR 60.3(c)(2)  
See page 5-7 in this manual for a discussion of Substantial Improvement.

1. Zones A1-30, AE, and AH shall have the lowest floor (including basement) elevated to at least one foot above the base flood elevation.
2. Zones AO and AH shall have adequate drainage paths around structures on slopes, to guide floodwater away from the proposed structures.
3. Zone AO shall have the lowest floor (including basement) elevated above the highest adjacent grade:
  - a. at least one foot higher than the depth specified in feet on the community's Flood Insurance Rate Map; or,
  - b. at least three feet if no depth number is specified.
4. Zone A shall have the lowest floor (including basement) elevated to at least one foot above the base flood elevation utilizing information obtained pursuant to Article III.H.1.b.; Article V.B.; or Article IX.D.
5. Zones V1-30 and VE shall meet the requirements of Article VI.P.

The NFIP requires structures to be at or above the BFE. The Maine standards require a one foot freeboard. See discussion on page 5-2 in this manual. Some communities in Maine have chosen to require a freeboard of two feet. Shoreland Zoning requires a one foot freeboard.

Required by NFIP: 44 CFR 60.3(c)(11)  
Communities without detailed studies would only reflect Zone A under paragraph 1 and should not include paragraphs F.2., F.3., and F.5. Most AO and AH zones occur in coastal communities.

Required by NFIP: 44 CFR 60.3(c)(7)  
NFIP requires elevation to the depth specified. Maine requires a one foot freeboard be added. A community may be more restrictive and add additional freeboard if desired.

Two feet is required by NFIP: 44 CFR 60.3(c)(7)

Required by NFIP: 44 CFR 60.3(b)(4)  
The NFIP requires structures to be at or above the BFE. The Maine standards require that communities adopt a freeboard of one foot.

Inland communities or communities without Velocity Zones should not include this paragraph.

G. **Non Residential** - New construction or substantial improvement of any non-residential structure located within:

See page 5-7 in this manual for a discussion of Substantial Improvement.

1. Zones A1-30, AE, and AH shall have the lowest floor (including basement) elevated to at least one foot above the base flood elevation, or together with attendant utility and sanitary facilities shall:
  - a. be floodproofed to at least one foot above the base flood elevation so that below that elevation the structure is watertight with walls substantially impermeable to the passage of water;

Required by NFIP: 44 CFR 60.3(c)(3)  
The Maine standards require that communities adopt a one foot freeboard.

Communities without detailed studies would only reflect Zone A under G.1. and should not include paragraphs G.2., G.3., and G.5. Most AO and AH zones occur in coastal communities.



- b. have structural components capable of resisting hydrostatic and hydrodynamic loads and the effects of buoyancy; and,
    - c. be certified by a registered professional engineer or architect that the floodproofing design and methods of construction are in accordance with accepted standards of practice for meeting the provisions of this section. Such certification shall be provided with the application for a Flood Hazard Development Permit, as required by Article III.K. and shall include a record of the elevation above mean sea level to which the structure is floodproofed.
- Required by NFIP: 44 CFR 60.3(c)(4)
- 2. Zones AO and AH shall have adequate drainage paths around structures on slopes, to guide floodwater away from the proposed structures.
- Required by NFIP: 44 CFR 60.3 (c)(11)
- 3. Zone AO shall have the lowest floor (including basement) elevated above the highest adjacent grade:
    - a. at least one foot higher than the depth specified in feet on the community's Flood Insurance Rate Map; or,
    - b. at least three feet if no depth number is specified; or,
    - c. together with attendant utility and sanitary facilities be floodproofed to meet the elevation requirements of this section and floodproofing standards of Article VI.G.1.
- Required by NFIP: 44 CFR 60.3 (c)(8)
- NFIP requires elevation to the depth specified. Maine requires a one foot freeboard be added. A community may be more restrictive and add additional freeboard if desired.
- NFIP only requires two feet - Maine recommends three feet.
- 4. Zone A shall have the lowest floor (including basement) elevated to at least one foot above the base flood elevation utilizing information obtained pursuant to Article III.H.1.b.; Article V.B.; or Article IX.D., or
    - a. together with attendant utility and sanitary facilities meet the floodproofing standards of Article VI.G.1.
- Required by NFIP: 44 CFR 60.3(b)(4)
- The Maine standards require that a community adopt a freeboard of one foot.
- 5. Zones V1-30 and VE shall meet the requirements of Article VI.P.
- Inland communities or communities without Velocity Zones should not include this paragraph.
- H. **Manufactured Homes** - New or substantially improved manufactured homes located within:
- See page 5-7 in this manual for a discussion of Substantial Improvement.

1. Zones A1-30, AE, and AH shall:

Required by NFIP: 44 CFR 60.3(c)(6)

- a. be elevated such that the lowest floor (including basement) of the manufactured home is at least one foot above the base flood elevation;
- b. be on a permanent foundation, which may be poured masonry slab or foundation walls, with hydraulic openings, or may be reinforced piers or block supports, any of which support the manufactured home so that no weight is supported by its wheels and axles; and,
- c. be securely anchored to an adequately anchored foundation system to resist flotation, collapse, or lateral movement. Methods of anchoring may include, but are not limited to:
  - (1) over-the-top ties anchored to the ground at the four corners of the manufactured home, plus two additional ties per side at intermediate points (manufactured homes less than 50 feet long require one additional tie per side); or by,
  - (2) frame ties at each corner of the home, plus five additional ties along each side at intermediate points (manufactured homes less than 50 feet long require four additional ties per side).
  - (3) all components of the anchoring system described in Article VI.H.1.c.(1)&(2) shall be capable of carrying a force of 4800 pounds.

Communities without detailed studies would only reflect Zone A under H.1. and should not include paragraphs H.2., H.3., and H.5. Most AO and AH zones occur in coastal communities.

See also: *Manufactured Home Installation in Flood Hazard Areas* - FEMA 85/September 1985. Maine Standards require a one foot freeboard.

The permanent foundation requirement is found in the Flood Insurance Manual, General Rules.

Required by NFIP: 44 CFR 60.3(b)(8) and (c)(6)

2. Zones AO and AH shall have adequate drainage paths around structures on slopes, to guide floodwater away from the proposed structures.

Required by NFIP: 44 CFR 60.3(c)(11)

3. Zone AO shall have the lowest floor (including basement) of the manufactured home elevated above the highest adjacent grade:

- a. at least one foot higher than the depth

specified in feet on the community's Flood Insurance Rate Map; or,

- b. at least three feet if no depth number is specified; and,
- c. meet the anchoring requirements of Article VI.H.1.c.

4. Zone A shall:

- a. be elevated on a permanent foundation, as described in Article VI.H.1.b., such that the lowest floor (including basement) of the manufactured home is at least one foot above the base flood elevation utilizing information obtained pursuant to Article III.H.1.b.; Article V.B; or Article IX.D.; and

- b. meet the anchoring requirements of Article VI.H.1.c.

5. Zones V1-30 and VE shall meet the requirements of Article VI.P.

Required by NFIP: 44 CFR 60.3(b)(4) and (b)(8)

Communities without detailed studies should modify this paragraph to include the standards in Article VI.H.1.

Inland communities or communities without Velocity Zones should not include this paragraph.

I. **Recreational Vehicles** - Recreational Vehicles located within:

Required by NFIP: 44 CFR 60.3(c)(14)

1. Zones A1-30, AE, and AH shall either:

- a. be on the site for fewer than 180 consecutive days,
- b. be fully licensed and ready for highway use. A recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions; or,
- c. be permitted in accordance with the elevation and anchoring requirements for "manufactured homes" in Article VI.H.1.

2. Zones V1-30 and VE shall meet the requirements of either Article VI.I.1.a. or b., or Article VI.P.

Required by NFIP: 44 CFR 60.3(e)(9)

Inland communities or communities without Velocity Zones should not include this paragraph.

J. **Accessory Structures** - Accessory Structures, as defined in Article XIV, located within Zones A1-30, AE, AO, AH, and A, shall be exempt from the elevation criteria required in

Accessory structures are not specifically addressed in the NFIP regulations. These new standards for small accessory structures have been developed by the State of Maine based on guidance from FEMA.

Article VI.F. & G. above, if all other requirements of Article VI and all the following requirements are met. Accessory Structures shall:

1. be 500 square feet or less and have a value less than \$3000;
2. have unfinished interiors and not be used for human habitation;
3. have hydraulic openings, as specified in Article VI.L.2., in at least two different walls of the accessory structure;
4. be located outside the floodway;
5. when possible be constructed and placed on the building site so as to offer the minimum resistance to the flow of floodwaters and be placed further from the source of flooding than is the primary structure; and,
6. have only ground fault interrupt electrical outlets. The electric service disconnect shall be located above the base flood elevation and when possible outside the Special Flood Hazard Area.

**K. Floodways -**

1. In Zones A1-30 and AE riverine areas, encroachments, including fill, new construction, substantial improvement, and other development shall not be permitted within a regulatory floodway which is designated on the community's "Flood Insurance Rate Map" or "Flood Boundary and Floodway Map," unless a technical evaluation certified by a registered professional engineer is provided demonstrating that such encroachments will not result in any increase in flood levels within the community during the occurrence of the base flood discharge.
2. In Zones A1-30, AE, and A riverine areas, for which no regulatory floodway is designated, encroachments, including fill, new construction, substantial improvement, and other development shall not be permitted in the floodway as determined in Article VI.K.3. unless a technical evaluation certified by a registered professional engineer is provided demonstrating that the cumulative effect of the proposed

Required by NFIP: 44 CFR 60.3(d)(3)

Communities without detailed studies should not include this paragraph.

Required by NFIP: 44 CFR 60.3(c)(10)

development, when combined with all other existing development and anticipated development:

- a. will not increase the water surface elevation of the base flood more than one foot at any point within the community; and,
  - b. is consistent with the technical criteria contained in Chapter 5 entitled "Hydraulic Analyses," *Flood Insurance Study - Guidelines and Specifications for Study Contractors*, (FEMA 37/ January 1995, as amended).
3. In Zones A1-30, AE, and A riverine areas for which no regulatory floodway is designated, the regulatory floodway is determined to be the channel of the river or other water course and the adjacent land areas to a distance of one-half the width of the floodplain as measured from the normal high water mark to the upland limit of the floodplain.

**L. Enclosed Areas Below the Lowest Floor-**

New construction or substantial improvement of any structure in Zones A1-30, AE, AO, AH, and A that meets the development standards of Article VI, including the elevation requirements of Article VI, paragraphs F, G, or H and is elevated on posts, columns, piers, piles, "stilts," or crawl spaces may be enclosed below the base flood elevation requirements provided all the following criteria are met or exceeded:

1. Enclosed areas are not "basements" as defined in Article XIV;
2. Enclosed areas shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of flood water. Designs for meeting this requirement must either:
  - a. be engineered and certified by a registered professional engineer or architect; or,
  - b. meet or exceed the following minimum criteria:
    - (1) a minimum of two openings having a total net area of not less than one square inch for every square foot of the enclosed area;

This paragraph exceeds the minimum NFIP standards for floodways not designated. The State of Maine chose to regulate on the conservative end of the scale. If an applicant wishes to hire an engineer to determine the actual floodway width, it is recommended that the engineer's determination be followed.

Required by NFIP: 44 CFR 60.3(c)(5)

Communities without detailed studies should only reference Zone A in this subsection.

See discussion on page 5-4 in this manual and FEMA Technical Bulletin, TB 1-93, *Openings in Foundation Walls*.

See Appendix F – Other Certificates for Hydraulic Openings Certificate.

It is recommended that the two openings be in two different walls.

(2) the bottom of all openings shall be below the base flood elevation and no higher than one foot above the lowest grade; and,

(3) openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they permit the entry and exit of flood waters automatically without any external influence or control such as human intervention, including the use of electrical and other non-automatic mechanical means;

3. The enclosed area shall not be used for human habitation; and,

4. The enclosed areas are usable solely for building access, parking of vehicles, or storage.

M. **Bridges** - New construction or substantial improvement of any bridge in Zones A1-30, AE, AO, AH, A, V1-30 and VE shall be designed such that:

1. when possible, the lowest horizontal member (excluding the pilings, or columns) is elevated to at least one foot above the base flood elevation; and

2. a registered professional engineer shall certify that:

a. the structural design and methods of construction shall meet the elevation requirements of this section and the floodway standards of Article VI.K.; and

b. the foundation and superstructure attached thereto are designed to resist flotation, collapse and lateral movement due to the effects of wind and water loads acting simultaneously on all structural components. Water loading values used shall be those associated with the base flood.

N. **Containment Walls** - New construction or substantial improvement of any containment wall located within:

1. Zones A1-30, AE, AH, A, V1-30 and VE shall:

This is more restrictive than the federal regs at 60.3(c)(5).

The limited uses permitted in paragraph 4 preclude human habitation and the placement of utilities, machinery, and equipment.

NFIP does not contain elevation requirements for bridges. The State of Maine chose to be more restrictive in an effort to mitigate the potential for damage to bridges.

NFIP does not contain development standards for containment walls. The State of Maine chose to be more restrictive to avoid contamination from or to flood water.

- a. have the containment wall elevated to at least one foot above the base flood elevation;
  - b. have structural components capable of resisting hydrostatic and hydrodynamic loads and the effects of buoyancy; and,
  - c. be certified by a registered professional engineer or architect that the design and methods of construction are in accordance with accepted standards of practice for meeting the provisions of this section. Such certification shall be provided with the application for a Flood Hazard Development Permit, as required by Article III.K.
2. Zones AO and AH shall have adequate drainage paths around containment walls on slopes, to guide floodwater away from the proposed walls.
  3. Zone AO shall have the top of the containment wall elevated above the highest adjacent grade:
    - a. at least one foot higher than the depth specified in feet on the community's Flood Insurance Rate Map; or,
    - b. at least three feet if no depth number is specified; and,
    - c. shall meet the requirements of Article VI.N.1.b. & c.

O. **Wharves, Piers and Docks** - New construction or substantial improvement of wharves, piers, and docks are permitted in Zones A1-30, AE, AO, AH, A, V1-30, and VE, in and over water and seaward of the mean high tide if the following requirements are met:

1. wharves, piers, and docks shall comply with all applicable local, state, and federal regulations; and
2. for commercial wharves, piers, and docks, a registered professional engineer shall develop or review the structural design, specifications, and plans for the construction.

NFIP requires permitting of wharves, piers, and docks as development in the floodplain but does not have any development standards. The State of Maine chose to be more restrictive based on guidance from FEMA.

Design and construction standards can be found in the Army Corps of Engineers (ACOE) *Coastal Engineering Manual*. The printed copy is due out in late 2002, however, portions are currently available on-line at: [www.bigfoot.wes.army.mil/cem001.html](http://www.bigfoot.wes.army.mil/cem001.html).

**P. Coastal Floodplains -**

1. All new construction located within Zones A1-30, AE, A, V1-30 and VE shall be located landward of the reach of mean high tide except as provided in Article VI.P.6.

Inland communities or communities without Velocity Zones should not include this section.

Required by NFIP: 44 CFR 60.3(e)(3)

2. New construction or substantial improvement of any structure located within Zones V1-30 or VE shall:

See page 5-7 in this manual for a discussion of Substantial Improvement.

- a. be elevated on posts or columns such that:

No walls are permitted. Must be an open foundation system. See FEMA Technical Bulletin, TB 5-93, *Free of Obstruction Requirements for Buildings Located in Coastal High Hazard Areas* for further guidance.

- (1) the bottom of the lowest horizontal structural member of the lowest floor (excluding the pilings or columns) is elevated to one foot above the base flood elevation;

See NFIP: 44 CFR 60.3(e)(4)(i)

The Maine standards require that communities adopt a freeboard of one foot.

- (2) the pile or column foundation and the elevated portion of the structure attached thereto is anchored to resist flotation, collapse, and lateral movement due to the effects of wind and water loads acting simultaneously on all building components; and,

Elevation for V Zones is measured differently than A Zones. Note that the bottom of the lowest horizontal member must be one foot above BFE.

Required by NFIP: 44 CFR 60.3(e)(4)(ii)

- (3) water loading values used shall be those associated with the base flood. Wind loading values used shall be those required by applicable state and local building standards.

Required by NFIP: 44 CFR 60.3(e)(4)(ii)

See: *Coastal Construction Manual* (FEMA - 55/June, 2000).

- b. have the space below the lowest floor:

Required by NFIP: 44 CFR 60.3(e)(5)

- (1) free of obstructions; or,

Required by NFIP: 44 CFR 60.3(e)(5)

- (2) constructed with open wood lattice-work, or insect screening intended to collapse under wind and water without causing collapse, displacement, or other structural damage to the elevated portion of the building or supporting piles or columns; or,

Required by NFIP: 44 CFR 60.3(e)(5)

Although the concept of breakaway walls is recognized by the NFIP, the practice is discouraged because once the walls are up, the owner frequently finishes off the interior and provides for human habitation in violation of the ordinance and the NFIP.

- (3) constructed with non-supporting breakaway walls which have a design safe loading resistance of not less than 10 or more than 20 pounds per square foot.

Also see NFIP: 44 CFR 60.3(e)(4). The *Coastal*



- c. require a registered professional engineer or architect to:

- (1) develop or review the structural design, specifications, and plans for the construction, which must meet or exceed the technical criteria contained in the *Coastal Construction Manual*, (FEMA-55/February, 1986); and,

- (2) certify that the design and methods of construction to be used are in accordance with accepted standards of practice for meeting the criteria of Article VI.P.2.

3. The use of fill for structural support in Zones V1-30 and VE is prohibited.

4. Human alteration of sand dunes within Zones V1-30 and VE is prohibited unless it can be demonstrated that such alterations will not increase potential flood damage.

5. The enclosed areas may be used solely for parking vehicles, building access, and storage.

6. Conditional Use - Lobster sheds and fishing sheds may be located seaward of mean high tide and shall be exempt from the elevation requirement in Article VI.G. only if permitted as a Conditional Use following review and approval by the Planning Board, as provided in Article VII, and if all the following requirements and those of Article VI.A., VI.K., and VI.L. are met:

- a. The conditional use shall be limited to low value structures such as metal or wood sheds 200 square feet or less and shall not exceed more than one story.
- b. The structure shall be securely anchored to the wharf or pier to resist flotation, collapse, and lateral movement due to the effect of wind and water loads acting simultaneously on all building components.
- c. The structure will not adversely increase wave or debris impact forces affecting nearby buildings.
- d. The structure shall have unfinished interiors and shall not be used for human habitation.

*Construction Manual* criteria meet or exceed minimum standards.

A V-Zone Certificate which can be used to accomplish this has been provided in Appendix F.

Recent hurricanes - i.e. Hugo and Andrew – have proven that structures built to meet the *Coastal Construction Manual* standards survive with very little damage when compared to structures that were built before the program standards were developed.

Required by NFIP: 44 CFR 60.3(e)(6)

Required by NFIP: 44 CFR 60.3(e)(7)

Required by NFIP: 44 CFR 60.3(e)(5)

Provisions for Conditional Use are not included in the NFIP regulations. Due to the State of Maine's strict variance criteria it would be difficult for lobster and fishing sheds to obtain a variance from the requirements of Article VI.G. and VI.P.1. The State Planning Office received guidance from FEMA on developing standards and procedures (see Article VII) for allowing Conditional Use Permits for these specific structures.

- e. Any mechanical, utility equipment and fuel storage tanks must be anchored and either elevated or floodproofed to one foot above the base flood elevation.
- f. All electrical outlets shall be ground fault interrupt type. The electrical service disconnect shall be located on shore above the base flood elevation and when possible outside the Special Flood Hazard Area.

#### **ARTICLE VII - CONDITIONAL USE REVIEW**

The Planning Board shall hear and decide upon applications for conditional uses provided for in this Ordinance. The Planning Board shall hear and approve, approve with conditions, or disapprove all applications for conditional uses. An applicant informed by the \_\_\_\_\_ that a Conditional Use Permit is required shall file an application for the permit with the Planning Board.

Provisions for Conditional Use are not included in the NFIP regulations. Due to the State of Maine's strict variance criteria, the State Planning Office received guidance from FEMA on developing a Conditional Use review and permitting process.

- A. Review Procedure for a Conditional Use Flood Hazard Development Permit
  - 1. The Flood Hazard Development Permit Application with additional information attached addressing how each of the conditional use criteria specified in the Ordinance will be satisfied, may serve as the permit application for the Conditional Use Permit.
  - 2. Before deciding any application, the Planning Board shall hold a public hearing on the application within thirty days of their receipt of the application.
  - 3. If the Planning Board finds that the application satisfies all relevant requirements of the ordinance, the Planning Board must approve the application or approve with conditions within 45 days of the date of the public hearing.
  - 4. A Conditional Use Permit issued under the provisions of this Ordinance shall expire if the work or change involved is not commenced within 180 days of the issuance of the permit by the Planning Board.
  - 5. The applicant shall be notified by the Planning Board in writing over the signature of the Chairman of the Planning

Board that flood insurance is not available for structures located entirely over water or seaward of mean high tide.

B. Expansion of Conditional Uses

1. No existing building or use of premises may be expanded or enlarged without a permit issued under this section if that building or use was established or constructed under a previously issued Conditional Use Permit or if it is a building or use which would require a Conditional Use Permit if being newly-established or constructed under this Ordinance.

**ARTICLE VIII - CERTIFICATE OF COMPLIANCE**

No land in a special flood hazard area shall be occupied or used and no structure which is constructed or substantially improved shall be occupied until a Certificate of Compliance is issued by the \_\_\_\_\_ subject to the following provisions:

A. For New Construction or Substantial Improvement of any elevated structure the applicant shall submit to the \_\_\_\_\_:

1. an Elevation Certificate completed by a Professional Land Surveyor, registered professional engineer, or architect, for compliance with Article VI, paragraphs F, G, H, or P and,
2. for structures in Zones V1-30 and VE, certification by a registered professional engineer or architect that the design and methods of construction used are in compliance with Article VI.P.2.

B. The applicant shall submit written notification to the \_\_\_\_\_ that the development is complete and complies with the provisions of this ordinance.

C. Within 10 working days, the \_\_\_\_\_ shall:

1. review the required certificate(s) and the applicant's written notification; and,
2. upon determination that the development conforms with the provisions of this ordinance, shall issue a Certificate of Compliance.

This section is designed to assist in administration, enforcement and record keeping.

Identify the community official responsible for the issuance of the Certificate.

Identify the community official responsible for the issuance of the Certificate.

A completed Elevation Certificate will assure that the "as built" elevations render the development in compliance with the elevation requirements in Article VI.

An Elevation Certificate is also required prior to purchasing flood insurance for Post-FIRM structures.

Identify the appropriate community official, i.e. the Code Enforcement Officer.

The number of working days is a community option. It may be changed to fit your community's criteria.

Required certificates may include an Elevation Certificate, Floodproofing Certificate, V Zone Certificate, and/or Hydraulic Openings Certificate.

## **ARTICLE IX - REVIEW OF SUBDIVISION AND DEVELOPMENT PROPOSALS**

The Planning Board shall, when reviewing subdivisions and other proposed developments that require review under other federal law, state law or local ordinances or regulations and all projects on 5 or more disturbed acres, or in the case of manufactured home parks divided into two or more lots, assure that:

- A. All such proposals are consistent with the need to minimize flood damage.
- B. All public utilities and facilities, such as sewer, gas, electrical and water systems are located and constructed to minimize or eliminate flood damages.
- C. Adequate drainage is provided so as to reduce exposure to flood hazards.
- D. All proposals include base flood elevations, flood boundaries, and, in a riverine floodplain, floodway data. These determinations shall be based on engineering practices recognized by the Federal Emergency Management Agency.
- E. Any proposed development plan must include a condition of plan approval requiring that structures on any lot in the development having any portion of its land within a Special Flood Hazard Area, are to be constructed in accordance with Article VI of this ordinance. Such requirement will be included in any deed, lease, purchase and sale agreement, or document transferring or expressing an intent to transfer any interest in real estate or structure, including but not limited to a time-share interest. The condition shall clearly articulate that the municipality may enforce any violation of the construction requirement and that fact shall also be included in the deed or any other document previously described. The construction requirement shall also be clearly stated on any map, plat, or plan to be signed by the Planning Board or local reviewing authority as part of the approval process.

This is more restrictive than the NFIP standards of 44 CFR 60.3 (b)(3) which sets a threshold of development greater than 50 lots or 5 acres, whichever is the lesser.

Required by NFIP: 44 CFR 60.3(a)(4)(i)

Required by NFIP: 44 CFR 60.3(a)(4)(ii)

Required by NFIP: 44 CFR 60.3(a)(4)(iii)

Required by NFIP: 44 CFR 60.3(b)(3), and by Title 30-A MRSA §4404. This includes unnumbered A Zones.

The Maine standard requires that FEMA recognized methods be used in making these determinations.

Required by the State Subdivision Law, Title 30-A MRSA §4404

Several Maine communities have failed to require this and have had to go back and correct the problem after the subdivision was recorded in the Registry of Deeds.

## **ARTICLE X - APPEALS AND VARIANCES**

The Board of Appeals of the (Town/City) of \_\_\_\_\_ may, upon written application of an aggrieved party, hear and decide appeals where it is alleged that there is an error in any order, requirement, decision, or determination made by, or failure to act by, the

Code Enforcement Officer or Planning Board in the administration or enforcement of the provisions of this Ordinance.

The Board of Appeals may grant a variance from the requirements of this Ordinance consistent with state law and the following criteria:

- |   |  |
|---|--|
| A. Variances shall not be granted within any designated regulatory floodway if any increase in flood levels during the base flood discharge would result.   | Required by NFIP: 44 CFR 60.6(a)(1)          |
| B. Variances shall be granted only upon:  |  |
| 1. a showing of good and sufficient cause; and,   | Required by NFIP: 44 CFR 60.6(a)(3)(i)       |
| 2. a determination that should a flood comparable to the base flood occur, the granting of a variance will not result in increased flood heights, additional threats to public safety, public expense, or create nuisances, cause fraud or victimization of the public or conflict with existing local laws or ordinances; and, | Required by NFIP: 44 CFR 60.6(a)(3)(iii)     |
| 3. a showing that the issuance of the variance will not conflict with other state, federal or local laws or ordinances; and,  | Required by NFIP: 44 CFR 60.6(a)(3)(iii)     |
| 4. a determination that failure to grant the variance would result in "undue hardship," which in this sub-section means:  | Required by State law: Title 30-A MRSA §4353 |
| a. that the land in question cannot yield a reasonable return unless a variance is granted; and,  |  |
| b. that the need for a variance is due to the unique circumstances of the property and not to the general conditions in the neighborhood; and,  |  |
| c. that the granting of a variance will not alter the essential character of the locality; and,   |  |
| d. that the hardship is not the result of action taken by the applicant or a prior owner.   |  |
| C. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief, and the Board of Appeals may impose such conditions to a variance as it  | Required by NFIP: 44 CFR 60.6(a)(4)          |

deems necessary.

- D. Variances may be issued for new construction, substantial improvements, or other development for the conduct of a functionally dependent use provided that:

Required by NFIP: 44 CFR 60.6(a)(7)

1. other criteria of Article X and Article VI.K. are met; and,
2. the structure or other development is protected by methods that minimize flood damages during the base flood and create no additional threats to public safety.

- E. Variances may be issued for the repair, reconstruction, rehabilitation, or restoration of Historic Structures upon the determination that:

Required by NFIP: 44 CFR 60.6(a)

1. the development meets the criteria of Article X, paragraphs A. through D. above; and,
2. the proposed repair, reconstruction, rehabilitation, or restoration will not preclude the structure's continued designation as a Historic Structure and the variance is the minimum necessary to preserve the historic character and design of the structure.

- F. Any applicant who meets the criteria of Article X, paragraphs A. through E. shall be notified by the Board of Appeals in writing over the signature of the Chairman of the Board of Appeals that:

Required by the NFIP: 44 CFR 60.6(a)(5)

1. the issuance of a variance to construct a structure below the base flood level will result in greatly increased premium rates for flood insurance up to amounts as high as \$25 per \$100 of insurance coverage;

Required by NFIP: 44 CFR 60.6(a)(5)(i)

2. such construction below the base flood level increases risks to life and property; and,

Required by NFIP: 44 CFR 60.6(a)(5)(ii)

3. the applicant agrees in writing that the applicant is fully aware of all the risks inherent in the use of land subject to flooding, assumes those risks and agrees to indemnify and defend the municipality against any claims filed against it that are related to the applicant's decision to use land located in a floodplain and that the applicant individually releases the municipality from any claims the applicant

Required by Title 14 MRSA §8101 et. seq. and 42 USC § 1983

may have against the municipality that are related to the use of land located in a floodplain.

**G. Appeal Procedure for Administrative and Variance Appeals**

1. An administrative or variance appeal may be taken to the Board of Appeals by an aggrieved party within thirty days after receipt of a written decision of the Code Enforcement Officer or Planning Board.
2. Upon being notified of an appeal, the Code Enforcement Officer or Planning Board, as appropriate, shall transmit to the Board of Appeals all of the papers constituting the record of the decision appealed from.
3. The Board of Appeals shall hold a public hearing on the appeal within thirty-five days of its receipt of an appeal request.
4. The person filing the appeal shall have the burden of proof.
5. The Board of Appeals shall decide all appeals within thirty-five days after the close of the hearing, and shall issue a written decision on all appeals.
6. The Board of Appeals shall submit to the \_\_\_\_\_ a report of all variance actions, including justification for the granting of the variance and an authorization for the \_\_\_\_\_ to issue a Flood Hazard Development Permit, which includes any conditions to be attached to said permit.
7. Any aggrieved party who participated as a party during the proceedings before the Board of Appeals may take an appeal to Superior Court in accordance with State laws within forty-five days from the date of any decision of the Board of Appeals.

G.1. through 5. and G.7. were added based on guidance received from the Office of the Maine Attorney General.

Required by NFIP: 44 CFR 60.6(a)(6)

In both blanks, identify the appropriate community official, i.e. the Code Enforcement Officer.

**ARTICLE XI - ENFORCEMENT AND PENALTIES**

- A. It shall be the duty of the \_\_\_\_\_ to enforce the provisions of this Ordinance pursuant to Title 30-A MRSA § 4452.
- B. The penalties contained in Title 30-A MRSA § 4452 shall apply to any violation of this Ordinance.

Identify the appropriate community official, i.e. the Code Enforcement Officer.

C. In addition to any other actions, the \_\_\_\_\_, upon determination that a violation exists, shall submit a declaration to the Administrator of the Federal Insurance Administration requesting a denial of flood insurance. The valid declaration shall consist of;

1. the name of the property owner and address or legal description of the property sufficient to confirm its identity or location;
2. a clear and unequivocal declaration that the property is in violation of a cited State or local law, regulation, or ordinance;
3. a clear statement that the public body making the declaration has authority to do so and a citation to that authority;
4. evidence that the property owner has been provided notice of the violation and the prospective denial of insurance; and,
5. a clear statement that the declaration is being submitted pursuant to Section 1316 of the National Flood Insurance Act of 1968, as amended.

Required by NFIP: 44 CFR 73.3

Identify the appropriate community official, i.e. the Code Enforcement Officer.

## **ARTICLE XII - VALIDITY AND SEVERABILITY**

If any section or provision of this Ordinance is declared by the courts to be invalid, such decision shall not invalidate any other section or provision of this Ordinance.

## **ARTICLE XIII - CONFLICT WITH OTHER ORDINANCES**

This Ordinance shall not in any way impair or remove the necessity of compliance with any other applicable rule, ordinance, regulation, bylaw, permit, or provision of law. Where this Ordinance imposes a greater restriction upon the use of land, buildings, or structures, the provisions of this Ordinance shall control.

## **ARTICLE XIV - DEFINITIONS**

Unless specifically defined below, words and phrases used in this Ordinance shall have the same meaning as they have at common law and to give this Ordinance its most reasonable application. Words used in the present tense include the future, the singular number includes the plural, and the plural number includes the singular. The word "may" is permissive; "shall" is mandatory and not



discretionary.

**Accessory Structure** - means a small detached structure that is incidental and subordinate to the principal structure.

**Adjacent Grade** - means the natural elevation of the ground surface prior to construction next to the proposed walls of a structure.

**Area of Shallow Flooding** - means a designated AO and AH zone on a community's Flood Insurance Rate Map (FIRM) with a one percent or greater annual chance of flooding to an average depth of one to three feet where a clearly defined channel does not exist, where the path of flooding is unpredictable, and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.

Definition taken from NFIP: 44 CFR 59.1

**Area of Special Flood Hazard** - means the land in the floodplain having a one percent or greater chance of flooding in any given year, as specifically identified in the Flood Insurance Study cited in Article I of this Ordinance.

Definition taken from NFIP: 44 CFR 59.1

**Base Flood** - means the flood having a one percent chance of being equaled or exceeded in any given year, commonly called the 100-year flood.

Definition taken from NFIP: 44 CFR 59.1

**Basement** - means any area of the building having its floor subgrade (below ground level) on all sides.

Definition taken from NFIP: 44 CFR 59.1

**Breakaway Wall** - means a wall that is not part of the structural support of the building and is intended through its design and construction to collapse under specific lateral loading forces, without causing damage to the elevated portion of the building or supporting foundation system.

Definition taken from NFIP: 44 CFR 59.1

**Building** - see **Structure**.

**Certificate of Compliance** - A document signed by the Code Enforcement Officer stating that a structure is in compliance with all of the provisions of this Ordinance.

Definition taken from NFIP: 44 CFR 59.1

**Code Enforcement Officer** - any person or board responsible for performing the inspection, licensing, and enforcement duties required by a particular statute or ordinance.

**Conditional Use** - means a use that because of its potential impact on surrounding areas and structures, is permitted only upon review and approval by the Planning Board pursuant to Article VII.

Not NFIP required. Definition developed by the State of Maine as part of the Conditional Use review and permitting process.

**Development** - means any change caused by individuals or entities to improved or unimproved real estate, including but not limited to the construction of

Definition taken from NFIP: 44 CFR 59.1

buildings or other structures; the construction of additions or substantial improvements to buildings or other structures; mining, dredging, filling, grading, paving, excavation, drilling operations or storage of equipment or materials; and the storage, deposition, or extraction of materials, public or private sewage disposal systems or water supply facilities.

**Elevated Building** - means a non-basement building

Definition taken from NFIP: 44 CFR 59.1

- a. built, in the case of a building in Zones A1-30, AE, A, AO, or AH, to have the top of the elevated floor, or in the case of a building in Zones V1-30, or VE, to have the bottom of the lowest horizontal structural member of the elevated floor, elevated above the ground level by means of pilings, columns, post, piers, or "stilts;" and
- b. adequately anchored so as not to impair the structural integrity of the building during a flood of up to one foot above the magnitude of the base flood.

In the case of Zones A1-30, AE, A, AO, or AH, **Elevated Building** also includes a building elevated by means of fill or solid foundation perimeter walls with hydraulic openings sufficient to facilitate the unimpeded movement of flood waters, as required in Article VI.L. In the case of Zones V1-30, or VE, **Elevated Building** also includes a building otherwise meeting the definition of elevated building, even though the lower area is enclosed by means of breakaway walls, if the breakaway walls meet the standards of Article VI.P.2.b.(3).

**Elevation Certificate** - An official form (FEMA Form 81-31, 07/00, as amended) that:

- a. is used to verify compliance with the floodplain management regulations of the National Flood Insurance Program; and,
- b. Is required for purchasing flood insurance.

**Flood or Flooding** - means:

Definition taken from NFIP: 44 CFR 59.1

- a. A general and temporary condition of partial or complete inundation of normally dry land areas from:
  - 1. The overflow of inland or tidal waters.
  - 2. The unusual and rapid accumulation or runoff of surface waters from any source.
- b. The collapse or subsidence of land along the shore of a lake or other body of water as a

result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature, such as flash flood or an abnormal tidal surge, or by some similarly unusual and unforeseeable event which results in flooding as defined in paragraph a.1. of this definition.

**Flood Elevation Study** - means an examination, evaluation and determination of flood hazards and, if appropriate, corresponding water surface elevations.

Definition taken from NFIP: 44 CFR 59.1

**Flood Insurance Rate Map (FIRM)** - means an official map of a community, on which the Federal Insurance Administrator has delineated both the special hazard areas and the risk premium zones applicable to the community.

Definition taken from NFIP: 44 CFR 59.1

**Flood Insurance Study** - see **Flood Elevation Study**.

**Floodplain or Flood-prone Area** - means any land area susceptible to being inundated by water from any source (see flooding).

Definition taken from NFIP: 44 CFR 59.1

**Floodplain Management** - means the operation of an overall program of corrective and preventive measures for reducing flood damage, including but not limited to emergency preparedness plans, flood control works, and floodplain management regulations.

Definition taken from NFIP: 44 CFR 59.1

**Floodplain Management Regulations** - means zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances (such as a floodplain ordinance, grading ordinance, and erosion control ordinance) and other applications of police power. The term describes such state or local regulations, in any combination thereof, which provide standards for the purpose of flood damage prevention and reduction.

Definition taken from NFIP: 44 CFR 59.1

**Floodproofing** - means any combination of structural and non-structural additions, changes, or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and contents.

Definition taken from NFIP: 44 CFR 59.1

**Floodway** - see **Regulatory Floodway**.

**Floodway Encroachment Lines** - mean the lines marking the limits of floodways on federal, state, and local floodplain maps.

Definition taken from NFIP: 44 CFR 59.1

**Freeboard** - means a factor of safety usually expressed in feet above a flood level for purposes of floodplain management. Freeboard tends to

compensate for the many unknown factors, such as wave action, bridge openings, and the hydrological effect of urbanization of the watershed, that could contribute to flood heights greater than the height calculated for a selected size flood and floodway conditions.

**Functionally Dependent Use** - means a use which cannot perform its intended purpose unless it is located or carried out in close proximity to water. The term includes only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and ship building and ship repair facilities, but does not include long-term storage or related manufacturing facilities.

Definition taken from NFIP: 44 CFR 59.1

**Historic Structure** - means any structure that is:

Definition taken from NFIP 44 CFR 59.1

- a. Listed individually in the National Register of Historic Places (a listing maintained by the Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;
- b. Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary of the Interior to qualify as a registered historic district;
- c. Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior; or
- d. Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either:
  1. By an approved state program as determined by the Secretary of the Interior, or
  2. Directly by the Secretary of the Interior in states without approved programs.

**Locally Established Datum** - means, for purposes of this ordinance, an elevation established for a specific site to which all other elevations at the site are referenced. This elevation is generally not referenced to the National Geodetic Vertical Datum (NGVD) or any other established datum and is used in areas where Mean Sea Level data is too far from a specific site to be practically used.

**Lowest Floor** - means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for parking

Definition taken from NFIP: 44 CFR 59.1

of vehicles, building access or storage in an area other than a basement area is not considered a building's lowest floor, provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements described in Article VI.L. of this Ordinance.

**Manufactured Home** - means a structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when connected to the required utilities. For floodplain management purposes the term manufactured home also includes park trailers, travel trailers, and other similar vehicles placed on a site for greater than 180 consecutive days.

Definition taken from NFIP: 44 CFR 59.1

**Manufactured Home Park or Subdivision** - means a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

Definition taken from NFIP: 44 CFR 59.1

**Mean Sea Level** - means, for purposes of the National Flood Insurance Program, the National Geodetic Vertical Datum (NGVD) of 1929, or other datum, to which base flood elevations shown on a community's Flood Insurance Rate map are referenced.

Definition taken from NFIP: 44 CFR 59.1

**Minor Development** - means all development that is not new construction or a substantial improvement, such as repairs, maintenance, renovations, or additions, whose value is less than 50% of the market value of the structure. It also includes, but is not limited to: accessory structures as provided for in Article VI.J., mining, dredging, filling, grading, paving, excavation, drilling operations, storage of equipment or materials, deposition or extraction of materials, public or private sewage disposal systems or water supply facilities that do not involve structures; and non-structural projects such as bridges, dams, towers, fencing, pipelines, wharves, and piers.

Developed by the State of Maine to support the review and permitting process of development projects which do not involve the new construction or substantial improvement of structures.

**National Geodetic Vertical Datum (NGVD)** - means the national vertical datum, whose standard was established in 1929, which is used by the National Flood Insurance Program (NFIP). NGVD was based upon mean sea level in 1929 and also has been called "1929 Mean Sea Level (MSL)".

**New Construction** - means structures for which the "start of construction" commenced on or after the effective date of the initial floodplain management regulations adopted by a community and includes any subsequent improvements to such structures.

Definition taken from NFIP: 44 CFR 59.1

**100-year flood** - see **Base Flood**.

**Recreational Vehicle** - means a vehicle which is:

Definition taken from NFIP: 44 CFR 59.1

- a. built on a single chassis;
- b. 400 square feet or less when measured at the

largest horizontal projection, not including slideouts;

- c. designed to be self-propelled or permanently towable by a motor vehicle; and
- d. designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

**Regulatory Floodway –**

Definition taken from NFIP: 44 CFR 59.1

- a. means the channel of a river or other water course and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot, and
- b. when not designated on the community's Flood Insurance Rate Map or Flood Boundary and Floodway Map, it is considered to be the channel of a river or other water course and the adjacent land areas to a distance of one-half the width of the floodplain, as measured from the normal high water mark to the upland limit of the floodplain.

**Riverine** - means relating to, formed by, or resembling a river (including tributaries), stream, brook, etc.

Definition taken from NFIP: 44 CFR 59.1

**Special Flood Hazard Area** - see **Area of Special Flood Hazard**.

**Start of Construction** - means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement, substantial improvement or other improvement was within 180 days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, or modification of any construction element, whether or not that alteration affects the external dimensions of the building.

Definition taken from NFIP: 44 CFR 59.1

**Structure** - means, for floodplain management purposes, a walled and roofed building. A gas or liquid storage tank that is principally above ground is also a structure.

Definition taken from NFIP: 44 CFR 59.1

**Substantial Damage** - means, damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damage condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

Definition taken from NFIP: 44 CFR 59.1

**Substantial Improvement** - means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the start of construction of the improvement. This term includes structures which have incurred substantial damage, regardless of the actual repair work performed. The term does not, however, include either:

Definition taken from NFIP: 44 CFR 59.1

- a. Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions; or
- b. Any alteration of a Historic Structure, provided that the alteration will not preclude the structure's continued designation as a historic structure, and a variance is obtained from the Board of Appeals.

**Variance** - means a grant of relief by a community from the terms of a floodplain management regulation.

Definition taken from NFIP: 44 CFR 59.1

**Violation** - means the failure of a structure or development to comply with a community's floodplain management regulations.

Definition taken from NFIP: 44 CFR 59.1

## **ARTICLE XV - ABROGATION**

This ordinance repeals and replaces any municipal ordinance previously enacted to comply with the National Flood Insurance Act of 1968 (P.L. 90-488, as amended).

60.3(e)